

VEGFR-2/DHFR-IN-2

Chemical Properties

CAS No. :

Formula: C₂₁H₂₁N₄O₄

Molecular Weight: 351.4

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.

Biological Description

Description	VEGFR-2/DHFR-IN-2 (compound 5b) is a dual inhibitor targeting VEGFR-2 and DHFR, with respective IC ₅₀ values of 0.623 μ M and 9.085 μ M. It demonstrates potent cytotoxicity against C26, HepG2, and MCF7 cancer cell lines, with IC ₅₀ values ranging from 3.59 μ M to 8.38 μ M. VEGFR-2/DHFR-IN-2 holds promise for cancer research [1].
Targets(IC ₅₀)	Others,Antibacterial,Antifungal,DHFR,VEGFR
In vitro	VEGFR-2/DHFR-IN-2, tested across concentrations of 2-1024 μ g/mL for 18-72 hours, demonstrates significant antimicrobial activity, evident from minimum inhibitory concentration (MIC) values against various pathogens: Escherichia coli, Pseudomonas aeruginosa, Streptococcus faecalis, Salmonella enterica, Methicillin-Sensitive Staphylococcus aureus (MSSA), Methicillin-Resistant Staphylococcus aureus (MRSA), Candida albicans, and Aspergillus niger at 64, 64, 32, 32, 16, 32, 64, and 256 μ g/mL respectively. Additionally, when applied in concentrations ranging from 0.5-100 μ M over 48 hours, this compound shows anticancer effects. Furthermore, its inhibition of DHFR and VEGFR-2 is confirmed through tests at 0-100 μ M for 30 minutes, with IC ₅₀ values of 9.085 μ M for DHFR and 0.623 μ M for VEGFR-2 inhibition. Cell cytotoxicity assays conducted on C26, HepG2, MCF7, and H69PR cell lines with concentrations of 0.5-100 μ M over 48 hours confirm its anticancer activity, exhibiting IC ₅₀ values of 3.59, 8.38, 6.75, and 28.45 μ M, respectively.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8458 mL	14.2288 mL	28.4576 mL
5 mM	0.5692 mL	2.8458 mL	5.6915 mL
10 mM	0.2846 mL	1.4229 mL	2.8458 mL
50 mM	0.0569 mL	0.2846 mL	0.5692 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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